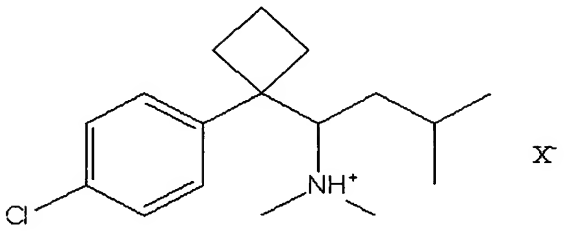
Claims

1. An inorganic acid salt of sibutramine, which has a structure of Chemical Formula 1, below, the inorganic acid salt being hydrogen sulfate, bromate or phosphate monohydrate.

[Chemical Formula 1]



$X = HSO_4$, Br, $H_2PO_4 \cdot H_2O$

2. The inorganic acid salt of sibutramine as set forth in claim 1, wherein the sibutramine hydrogen sulfate is a first crystalline sibutramine hydrogen sulfate having an X-ray diffraction pattern in which peaks appear at 2θ values of 6.50, 12.18, 12.38, 12.58, 13.06, 14.00, 16.76, 17.04, 18.06, 19.68, 20.32, 20.63, 21.34, 21.82, 22.28, 22.54, 23.32, 24.50, 25.80, 26.42, 28.24, 28.64, 29.28, and 33.34.

3. The inorganic acid salt of sibutramine as set

forth in claim 1, wherein the sibutramine hydrogen sulfate is a second crystalline sibutramine hydrogen sulfate having an X-ray diffraction pattern in which peaks appear at 2θ values of 5.73, 6.49, 12.18, 12.51, 13.13, 14.02, 14.79, 16.97, 17.38, 20.62, 21.40, 21.83, 22.31, 22.68, 24.51, 24.88, 25.82, 26.45, and 31.60.

4. The inorganic acid salt of sibutramine as set forth in claim 1, wherein the sibutramine hydrogen sulfate is a third crystalline sibutramine hydrogen sulfate having an X-ray diffraction pattern in which peaks appear at 2θ values of 6.64, 10.24, 13.03, 15.04, 17.00, 17.53, 17.08, 19.06, 20.52, 22.72, 23.23, 24.23, 25.70, 26.40, and 27.57.

5. The inorganic acid salt of sibutramine as set forth in claim 1, wherein the sibutramine bromate is crystalline sibutramine bromate having an X-ray diffraction pattern in which peaks appear at 2θ values of 6.96, 11.48, 13.88, 16.64, 17.14, 18.14, 19.68, 20.92, 21.32, 21.86, 22.16, 22.86, 24.30, 26.16, 26.40, 27.42, 28.06, 28.32, 29.52, 31.58, 32.94, 34.54, 37.42, and 37.82.

6. The inorganic acid salt of sibutramine as set forth in claim 1, wherein the sibutramine phosphate monohydrate is crystalline sibutramine phosphate monohydrate having an X-ray diffraction pattern in which

peaks appear at 2θ values of 7.66, 10.68, 11.06, 11.50, 14.46, 15.40, 15.74, 17.22, 17.84, 18.08, 18.98, 19.68, 21.18, 21.50, 21.88, 22.84, 23.18, 23.62, 24.42, 24.72, 25.98, 27.52, 28.38, 28.64, and 29.28.

7. A method of preparing the sibutramine hydrogen sulfate according to claim 1, comprising reacting sibutramine and sulfuric acid.

8. A method of preparing the sibutramine bromate according to claim 1, comprising reacting sibutramine and bromic acid.

9. A method of preparing the sibutramine phosphate and phosphate monohydrate according to claim 1, comprising reacting sibutramine and phosphoric acid.

10. The method as set forth in any one of claims 7 to 9, wherein the reaction takes place in an organic solvent selected from the group consisting of acetone, ethyl acetate, methanol, ethanol, isopropanol, acetonitrile, isopropyl ether, methylethyl ketone, dichloromethane and combination thereof.

11. A pharmaceutical composition for treating or preventing obesity and related disorders, depression,

Parkinson's disease, insulin-independent diabetes mellitus or epilepsy, comprising a therapeutically effective amount of the sibutramine hydrogen sulfate, sibutramine bromate or sibutramine phosphate monohydrate according to claim 1 and a pharmaceutically acceptable diluent or carrier.

12. The pharmaceutical composition as set forth in claim 11, wherein the sibutramine hydrogen sulfate, sibutramine bromate or sibutramine phosphate is contained in a therapeutically effective amount of 1 to 50 mg.

13. A method of treating or preventing obesity and related disorders, depression, Parkinson's disease, insulin-independent diabetes mellitus or epilepsy, comprising administering the pharmaceutical composition of claim 11.